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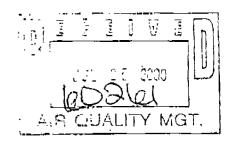


STATE OF DELAWARE OFFICE OF THE GOVERNOR

July 14, 2000

THOMAS R, CARPER COVERNOR

Mr. Bradley M. Campbell (3RA00)
Regional Administrator
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA, 19103-2029



JUI 2 4 2000

DNREC

Dear Mr. Campbell:

The purpose of this letter is to fulfill Delaware's obligations under Section 107 of the Clean Air Act Amendments of 1990 that require states to recommend attainment status designations for its counties under the 8-hour national ambient air quality standard (NAAQS) for ozone, and to recommend placement of those counties in a non-attainment area.

Area Description

Delaware's three counties, listed from north to south, are New Castle, Kent and Sussex. The northern portion of New Castle County lies above the Chesapeake and Delaware Canal, a waterway that connects the Chesapeake Bay with the Delaware Bay. This part of New Castle County is metropolitan, heavily industrialized, and very similar to the counties of Pennsylvania and New Jersey that immediately surround Philadelphia. The remainder of Delaware lies south of the Chesapeake and Delaware Canal. This area comprises the southern portion of New Castle County, and all of Kent and Sussex Counties. This area is part of the Delmarva Peninsula, a strip of land extending below the Chesapeake and Delaware Canal, bordered on the east by the Delaware Bay and Atlantic Ocean, and bordered on the west and south by the Chesapeake Bay. In addition to Delaware, the Delmarva Peninsula contains all or portions of 8 Maryland counties (lower Cecil, Kent, Queen Anne's, Caroline, Dorchester, Wicomico, Worcester and Somerset) and 2 Virginia counties (Accomack and Northampton). Except for a few small pockets of relatively high growth, the entire Delmarva Peninsula, including Delaware's portion, is generally rural, with agriculture as the predominant business. The counties on the Delmarva Peninsula share similar emissions profiles, population densities, traffic patterns topography and meteorology. The Peninsula counties also share similar air quality problems. Although only a few of these counties have ozone monitors, all those that do are showing numerous violations of the 8-hour standard. In addition, UAM-V photochemical modeling runs performed by EPA

using a 1996 base year emissions inventory have projected that all of the counties on the Delmarva Peninsula (except for Wicomico Co., MD) experience episodes similar to Delaware's in exceeding the 8-hour NAAQS. The results of these runs are posted on the EPA web site at http://www.epa.gov/tin/rto/areas/max4.htm.

Attainment Status

The 8-hour ozone NAAQS is established at 0.08 ppm (80 ppb). 8-hour monitored values of 85 ppb or greater constitute exceedances of the NAAQS. Based on the most recent three years of ozone monitoring data (1997 through 1999), the design values for New Castle, Kent and Sussex counties are 100 ppb, 99 ppb, and 99 ppb, respectively. Therefore all three of Delaware's counties are in non-attainment of the 8-hour ozone NAAQS.

Non-attainment Area

EPA is recommending that the Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area (C/MSA) serve as the presumptive boundary for the 8-hour NAAQS non-attainment area. Although Delaware is a small state, the division of the State into two areas of distinctly different characteristics as described above makes it difficult to associate the entire state with a C/MSA-derived non-attainment area. Northern New Castle County shares clear similarities with the Philadelphia area, but the dissimilarity of the remainder of Delaware makes it a poor fit with the Philadelphia area. The similarity of all of the counties on the Delmarva Peninsula (including Maryland's and Virginia's as well as Delaware's) suggests that they should be kept together in the same non-attainment area. However, the distance of those counties from all metropolitan areas in the region makes it difficult to associate with those metropolitan areas. Also, the Chesapeake Bay separates the Peninsula from the nearest metropolitan areas such as Norfolk, VA, Richmond, VA, Washington, D.C., and Baltimore, MD. However, transport from these metropolitan areas significantly impacts ozone concentrations on all portions of the Peninsula.

On the other hand, grouping the Peninsula counties into a stand-alone non-attainment area is impractical. Because of its agrarian character and the heavy influence of transport from outside the area, the Delmarva Peninsula would have little control over its own ability to demonstrate and achieve attainment. The Peninsula needs to be associated with upwind regions of influence.

Delaware believes that the only practical way to fit disparate areas into a coherent non-attainment area is to define a contiguous non-attainment area that is as regional as possible. Such an area should map a wide region of influence on the ozone problem. This regional area should be broad enough to include the major upwind zones of influence that are causing transport, as well as the major downwind zones of non-attainment that are impacted by transport.

Furthermore, Delaware believes that the C/MSA, being based on census data rather than airshed analysis data, should not be the presumptive boundary for non-attainment areas. Census data, in comparison to airshed analysis data, represents a poor surrogate for determining non-

attainment boundaries. Although the C/MSA approach was used under the 1-hour ozone NAAQS, the science of photochemical modeling and airshed analysis has progressed significantly since the passage of the Clean Air Act Amendments of 1990. The C/MSA-based approach has had minimal success for achieving attainment of the 1-hour NAAQS. In the meantime, detailed regional airshed studies have been completed, such as the Regional Oxidant Modeling (ROM) project covering most of the Ozone Transport Region (OTR) states, and the Ozone Transport Assessment Group (OTAG) project covering most of the Eastern U.S. These studies have demonstrated that the ozone problem is transport-driven and regional in scope, rather than localized or confined to relatively small C/MSA's. These studies have further demonstrated that individual C/MSA's do not have complete control over their ability to demonstrate or achieve attainment. This reality has also been acknowledged through EPA's Federal Advisory Committee Act (FACA) process, which concluded that areas violating ozone standards should be associated with upwind areas influencing such violations. Delaware believes that this conclusion should become the cornerstone of good air quality planning and policy, starting with the crucial boundary determinations.

Delaware has examined it's non-attainment counties against the eleven criteria identified in EPA's March 28, 2000 guidance memorandum from John S. Seitz entitled, Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards (hereafter referred to as "the guidance"). The guidance suggests that these criteria, which include population density, monitoring data, traffic patterns, emission sources, topography and meteorology, should be used to draw the boundaries of the non-attainment area when an area larger or smaller than a C/MSA is being considered. We have come to the conclusion that these criteria are more applicable to devising and applying the proper control strategies for specific counties or zones within the non-attainment area after the non-attainment area is established. But these criteria should be considered as secondary to the regional airshed studies when designating non-attainment area boundaries.

In summary, Delaware recommends that EPA designate a regional non-attainment area that includes at least all of the contiguous monitored and modeled non-attainment zones within the OTR, and the appropriate upwind regions of influence determined from modeling, i.e., those from northern Virginia through Maine, and assign the appropriate design value. Delawere recommends that all three of its counties be included in that regional non-attainment area. Delaware believes that this approach, being based on the science of airshed analysis, is more sound than the C/MSA-based approach. Delaware believes that the regional approach will also foster more state cooperation in demonstrating attainment through the sharing of attainment activities through the Northeastern Regional Technical Center. Finally, Delaware believes that the cleven criteria in the guidance should be applied in conjunction with intensive photochemical modeling to determine the fairest and most efficient application of control strategies to specific non-attainment counties and zones. "Efficient application" in this case may be more accurately defined on the basis of cost-per-ppb reduction in ozone concentration rather than the traditional cost-per-ton of emission reduction. Delaware supports this balanced approach, and has committed significant resources in the form of professional staff, training and computer hardware/software in order to contribute its fair share of participation in the work of the Regional Technical Center.

The progress we have made to date in the control of ozone has only been possible because of the collaborative process between EPA and the states. Your continued efforts to establish stringent federal mobile source emission standards, develop improved modeling and other analytical techniques, and develop policies that facilitate the development and implementation of large-scale attainment strategies will be absolutely imperative to our continued success. While it is too early in the process to identify specific policy changes that may be needed, I would speculate that modifications to current new source review and transportation conformity policies could be devised to better facilitate the strategy that Delaware is proposing. I hope that EPA will be open to policy changes that will support the technically sound, equitable and cost-effective ozone attainment process being recommended by Delaware.

Thank you for your consideration of these recommendations. If you feel you can not support the approach being recommended, we would like an opportunity to continue this discussion before you propose an alignment of Delaware's three nonattainment counties. If you have any questions concerning this submittal or would like to discuss it further, please contact Mr. Darryl Tyler, Program Administrator of the Air Quality Management Section at (302) 739-4791.

Sincerely,

Thomas R. Carper

Governor

pc: Nicholas A. Di Pasquale
Denise Ferguson-Southard
Darryl Tyler

Judith Katz
David Arnold